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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,816	06/13/2007	Soon Mo Hwang	5025-0008	5120

22429 7590 09/18/2009
LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

EXAMINER

LAUX, DAVID J

ART UNIT	PAPER NUMBER
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3743

MAIL DATE	DELIVERY MODE
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09/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/599,816	Applicant(s) HWANG ET AL.	
	Examiner David J. Laux	Art Unit 3743	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 September 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: _____.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
 13. ☒ Other: In applicant's submission of the claims as they currently stand, claims 7 & 8 are incorrectly labeled "New" instead of "Previously Presented." Appropriate action is required.

/Kenneth B Rinehart/
Supervisory Patent Examiner, Art Unit 3743

/D. J. L./
Examiner, Art Unit 3743

Continuation of 11. does NOT place the application in condition for allowance because: examiner respectfully disagrees with applicant's arguments.

Applicant first argues that one having ordinary skill in the art would have no motivation to combine the gas burner of '757 with the plasma treatment apparatus of '182 because '182 fails to disclose the need for preheating a plasma treatment reactor. However, '757 discloses a plasma reactor vessel and the need for preheating the reactor vessel using a gas burner (Col. 4, lines 14-17). It would have been obvious for one having ordinary skill in the art at the time of invention, when attempting to start up the plasma reactor of '182, to turn to prior knowledge in the art, such as the disclosure of '757, to use an auxilliary gas burner to preheat the reaction vessel to the temperature at which a plasma torch can be operated reliably.

Applicant next argues that '182 fails to disclose a cyclonic gas flow. Examiner respectfully disagrees with applicant's argument. Although the outer wall of the refractory vessel is circular, the separator wall is shown perpendicular to the plasma torch in the horizontal angle. As shown in Fig. 1A, the plasma torch could be angled slightly steeper to more directly engage the incoming waste (as denoted by auger (15)), which would cause the gases to bank off the wall at an angle inducing a cyclonic rotation about an essentially horizontal axis (as shown in the marked-up version of Fig. 1A in the previous final rejection). '182 specifically discloses angling the plasma torch to optimize the processing effect (Col. 6, lines 54-57), and (especially in light of the teaching of horizontal cyclonic gas flow of '383) a turbulent gas flow ensuring adequate mixing of the gases and ash would have been well within the ability of one having ordinary skill in the art.

Applicant further argues that the separator wall is upwardly extending wall instead of a downwardly extending wall. It should be noted that depending upon where on the wall one starts, the walls depicted in applicant's Fig. 3 or '182: Fig. 1 could be either upwardly extending or downwardly extending (for example, the wall in '182 could be viewed as starting at the top end and extending down to the base OR extending from the base up to the terminal end). As applicant has not specified in the claims that the wall extend from a certain point, examiner is of the opinion that the disclosure of '182 is well within the realm of the broadest reasonable interpretation.

Applicant concludes by arguing that there is a conflict in the disclosure of '182 with the teaching of '757 in that the plasma torch is tiltable in '182 while the reaction chamber in '757 is tiltable. Examiner is unsure of why applicant believes that both elements are mutually exclusive, especially since '182 discloses both a tiltable plasma torch (Col. 6, lines 54-57) and a tiltable reaction chamber (Col. 7, lines 14-19).mm

For these reasons, examiner remains unconvinced that the claims, as currently amended, are patentable over '182 as combined with '757 and '383.